

# GT HT Triplanar Geogrid - Geotextile Geocomposite

TENAX GT HT is a polypropylene geocomposite especially designed for soil stabilization and reinforcement applications. GT HT geocomposite is manufactured by bonding a TENAX 3D-HT geogrid to a nonwoven polypropylene geotextile. GT HT geocomposites feature superior high tensile strengths and modulus, excellent resistance to construction damage, and environmental exposure. TENAX 3D Grid HT is manufactured from an unique extrusion technique resulting in a perforated polypropylene sheet that is specifically shaped to create a triplanar reinforcing structure. This unique extrusion process produces a large concave shaped rib to better trap aggregate materials by restricting the horizontal movement of stone particles and preventing displacement. Higher profile ribs and junctions improve interlock and stress distribution, thereby reducing rutting and aggregate base thickness. 3D-HT geogrid allows strong mechanical interlock with the soil being reinforced, while the geotextile provides separation and filtration without preventing the soil-geogrid interlock.

## Typical Applications:

Coal Ash impoundment closures, base reinforcement, reduction of required structural fill, load distribution, reduction of mud pumping, subgrade stabilization, embankment and slope stabilization

## GEOGRID PRODUCT PROPERTIES<sup>1</sup>

Technical Characteristics	Units	MD Values	XMD Values
Rib Pitch	mm (in)	32 (1.26)	32 (1.26)
Mid-Rib Depth	mm (in)	3.5 (0.14)	1.2 (0.05)
Mid-Rib Width	mm (in)	3.7 (0.15)	2.0 (0.08)
Rib Shape		Inverted T Beam	Rectangle

## GEOGRID STRUCTURAL INTEGRITY<sup>1</sup>

Aperture Stability	N-m/deg	1.20
Overall Flexural Rigidity	mg-cm	2,750,000
Radial Stiffness at low strain @ 0.5% Strain	kN/m (lb/ft)	372 (25,520)

## GEOGRID DURABILITY<sup>1</sup>

Resistance to Installation Damage	%SC/%SW/%GP	100/100/100
Resistance to Long Term Degradation	%	100
Resistance to UV Degradation	%	100

## GEOTEXTILE HYDRAULIC PROPERTIES<sup>1</sup>

	TEST METHOD	ENGLISH	METRIC
Apparent Opening Size (AOS)	ASTM D-4751	70 US Std. Sieve	0.212 mm
Permittivity	ASTM D-4491	1.5 sec <sup>-1</sup>	1.5 sec <sup>-1</sup>
Water Flow Rate	ASTM D-4491	110 gpm/ft <sup>2</sup>	4480 l/min/m <sup>2</sup>

## DIMENSIONS AND DELIVERY

The triplanar geogrid shall be delivered to the job site in roll form with each roll individually identified and nominally measuring 3.93m (12.9-FT) in width and 75m (246-FT) in length (352.6-sy) or 4.87m (16-FT) in width and 75m (246-FT) in length (437.3-sy).

### Note

1. Property values for individual components are recorded prior to lamination.

Tenax warrants that the geogrid products delivered hereunder conform to the stated specification at the time of delivery. All other warranties including claims for performance or suitability for application are excluded. This product specification supersedes all prior specifications for the product described above and is not applicable for products shipped before November 2014.



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